

III. Remarks

Responsive to the outstanding Examiner's Action, applicant has carefully studied the Examiner's comments relative thereto. Favorable reconsideration of this application is respectfully requested in light of the above amendments and the following detailed discussion.

Claims 1-28 are pending in the application. Claims 27 and 28 have been withdrawn from consideration. Claims 1-26 have been initially rejected by the Examiner. Claim 3 is objected to. Claims 1, 3, 7 16 and 26 have been amended. Claims 16 and 26 were amended to correct typographical errors. No new matter has been added with the amendments. Claim 22 has been cancelled.

The Examiner has objected to the drawings as reference number 54 should be present in Figs. 5-8 and reference number 74 should be present in the figures. The Examiner suggested Figs. 5-8 could be corrected by replacing reference number 50 with 54. Applicants appreciate the Examiner's suggestion and the applicants have amended the figures as suggested. Figures 5-8 have also been amended to add reference number 74.

The Examiner also objected to the figures because a line/arrow should be drawn from reference number 28 to the dampening structure in Fig. 4. Applicants appreciate the Examiner's suggestion and applicants have amended Figure 4 as suggested by the Examiner.

The Examiner also objected to Figs. 2-4 as the Examiner indicated Figs. 2-4 depict the dampening structure on the left side of the Figures potentially

exposed to molten metal while the dampening structure on the right side of the

Figures is completely surrounded by the sand core.

Applicants appreciate the Examiner's careful review of the Figures and his comments related thereto. Applicants draw the Examiner's attention to page 6, lines 21-22 of the written description which states "[t]he dampening structure 28 may be entirely embedded in the core 40 or any portion of it may be exposed from the core 40." Nevertheless, for the preferred embodiment of the invention depicted in Figs. 2-4, applicants desired to depict the dampening structure entirely embedded in the core. Applicants are submitting new drawing sheets herewith depicting Figs. 2-4 where the dampening structure is depicted entirely embedded in the core.

The Examiner objected to claim 3 since two terms in original claim 3 lacked proper antecedent basis. Applicants have amended the dependency of claim 3 from claim 1 to claim 2. Applicants believe that with this change in dependency, the terms in claim 3 now have proper antecedent basis.

Claims 1-3, 7-14, 17-21, 23, 24 and 26 were rejected by the Examiner as being anticipated by Oono et al. (U.S. Patent No. 5,004,078). Applicants have amended independent claims 1 and 7 to specify that the sand core is formed with at least one dampening structure within the sand core where the dampening structure has a plurality of air passages. Applicants have also amended independent claims 1 and 7 to specify that the part has a plurality of individual solid air directing structures. Additionally, applicants have amended independent

claims 1 and 7 to indicate that the dampening structure is located between the solid air directing structures.

Oono fails to teach, either explicitly or implicitly, a dampening structure having a plurality of air passages, as now required by amended claims 1 and 7. Instead, Oono only provides for a dampening member having a solid, circular cross-section or a solid, rectangular cross-section. In light of the fact that Oono fails to teach a dampening structure having a plurality of air passages, as now required by amended claims 1 and 7, applicants respectfully submit that the rejection of claims 1 and 7 in light of the Oono reference has been overcome.

Oono also fails to teach, either explicitly or implicitly, that the part has a plurality of individual, solid air directing structures, as now required by amended claims 1 and 7. The Oono reference teaches that each of the ribs in each of the embodiments disclosed have either elliptical holes or rectangular holes. In the third embodiment disclosed in Oono, each rib has two sets of holes. Since Oono fails to teach a part having a plurality of individual, solid air directing structures, as now required by amended claims 1 and 7, applicants respectfully submit that the rejection of claims 1 and 7 in light of the Oono reference has been overcome.

Additionally, Oono fails to teach, either explicitly or implicitly, that the dampening structure is located between the solid air directing structures, as now required by amended claims 1 and 7. Instead, Oono only states that the dampening member is located within each rib, not between the individual ribs. Oono's use of two dampening members in two elliptical or rectangular holes still locates the dampening members within each rib, not between the individual ribs.

Applicants respectfully submit that the failure by Oono to teach a dampening structure located within each rib, as now required by amended claims 1 and 7, indicates that the reference has been overcome.

In light of the above discussion and the amendments to claims 1 and 7, amended claims 1 and 7 of the present invention are patentable. Furthermore, claims 2-3, 8-14, 17-21, 23, 24 and 26 each depend on claims 1 or 7, either directly or indirectly, and contain all of the limitations thereof. Therefore, because claims 1 and 7 are patentable and claims 2-3, 8-14, 17-21, 23, 24 and 26 each depend on claims 1 and 7, claims 2-3, 8-14, 17-21, 23, 24 and 26 are patentable over the Oono reference.

The Examiner also rejected claims 4-6 and 15 under 35 USC 103(a) as being unpatentable over Oono et al in view of Kim (U.S. Patent No. 5,479,981).

In light of the above discussion and the amendments to claims 1 and 7, upon which claims 4-6 and 15 depend, it is respectfully submitted that claims 4-6 and 15 are now patentable.

The Examiner also rejected claims 22 and 25 under 35 USC 103(a) as being unpatentable over Oono et al in view of Pollock et al. (U.S. Patent No. 6,336,533). In light of the above discussion and the amendments to claim 7, upon which claims 22 and 25 depend, it is respectfully submitted that claims 22 and 25 are now patentable.

For example, amended claim 7 now requires that the part have a plurality of individual solid air directing structures. Additionally, claim 7 has been amended to indicate that the dampening structure is located between the solid air

directing structures. Neither Oono or Pollock disclose either of these features.

Additionally, nothing in either reference renders either of these newly added features obvious.

In view of the above amendments, applicants believe all of the claims of record now define patentable subject matter over the art of record. Therefore, the application appears to be in condition for allowance. Accordingly, an early Notice of Allowance is respectfully requested.

Should the Examiner wish to modify any of the language of the claims, applicants' attorney suggests a telephone interview in order to expedite the prosecution of the application.

Respectfully submitted,



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